



## Red Hat build of OpenJDK 17

# Release notes for Red Hat build of OpenJDK 17.0.6



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## Abstract

The Release notes for Red Hat build of OpenJDK 17.0.6 document provides an overview of new features in Red Hat build of OpenJDK 17, and a list of potential known issues and possible workarounds.

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## PREFACE

Open Java Development Kit (OpenJDK) is a free and open source implementation of the Java Platform, Standard Edition (Java SE). The Red Hat build of OpenJDK is available in three versions: 8u, 11u, and 17u.

Packages for the Red Hat build of OpenJDK are made available on Red Hat Enterprise Linux and Microsoft Windows and shipped as a JDK and JRE in the Red Hat Ecosystem Catalog.

## PROVIDING FEEDBACK ON RED HAT BUILD OF OPENJDK DOCUMENTATION

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### Procedure

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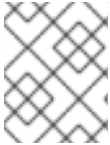
## MAKING OPEN SOURCE MORE INCLUSIVE

Red Hat is committed to replacing problematic language in our code, documentation, and web properties. We are beginning with these four terms: master, slave, blacklist, and whitelist. Because of the enormity of this endeavor, these changes will be implemented gradually over several upcoming releases. For more details, see [our CTO Chris Wright's message](#).

## CHAPTER 1. SUPPORT POLICY FOR RED HAT BUILD OF OPENJDK

Red Hat will support select major versions of Red Hat build of OpenJDK in its products. For consistency, these versions remain similar to Oracle JDK versions that are designated as long-term support (LTS).

A major version of Red Hat build of OpenJDK will be supported for a minimum of six years from the time that version is first introduced. For more information, see the [OpenJDK Life Cycle and Support Policy](#).



### NOTE

RHEL 6 reached the end of life in November 2020. Because of this, Red Hat build of OpenJDK is not supporting RHEL 6 as a supported configuration..

## CHAPTER 2. DIFFERENCES FROM UPSTREAM OPENJDK 17

Red Hat build of OpenJDK in Red Hat Enterprise Linux contains a number of structural changes from the upstream distribution of OpenJDK. The Microsoft Windows version of Red Hat build of OpenJDK attempts to follow Red Hat Enterprise Linux updates as closely as possible.

The following list details the most notable Red Hat build of OpenJDK 17 changes:

- FIPS support. Red Hat build of OpenJDK 17 automatically detects whether RHEL is in FIPS mode and automatically configures Red Hat build of OpenJDK 17 to operate in that mode. This change does not apply to Red Hat build of OpenJDK builds for Microsoft Windows.
- Cryptographic policy support. Red Hat build of OpenJDK 17 obtains the list of enabled cryptographic algorithms and key size constraints from the RHEL system configuration. These configuration components are used by the Transport Layer Security (TLS) encryption protocol, the certificate path validation, and any signed JARs. You can set different security profiles to balance safety and compatibility. This change does not apply to Red Hat build of OpenJDK builds for Microsoft Windows.
- Red Hat build of OpenJDK on RHEL dynamically links against native libraries such as **zlib** for archive format support and **libjpeg-turbo**, **libpng**, and **giflib** for image support. RHEL also dynamically links against **Harfbuzz** and **Freetype** for font rendering and management. This change does not apply to Red Hat build of OpenJDK builds for Microsoft Windows.
- The **src.zip** file includes the source for all of the JAR libraries shipped with Red Hat build of OpenJDK.
- Red Hat build of OpenJDK on RHEL uses system-wide timezone data files as a source for timezone information.
- Red Hat build of OpenJDK on RHEL uses system-wide CA certificates.
- Red Hat build of OpenJDK on Microsoft Windows includes the latest available timezone data from RHEL.
- Red Hat build of OpenJDK on Microsoft Windows uses the latest available CA certificate from RHEL.

### Additional resources

- See, [Improve system FIPS detection \(RHEL Planning Jira\)](#)
- See, [Using system-wide cryptographic policies \(RHEL documentation\)](#)

## CHAPTER 3. RED HAT BUILD OF OPENJDK FEATURES

The latest Red Hat build of OpenJDK 17 release might include new features. Additionally, the latest release might enhance, deprecate, or remove features that originated from previous Red Hat build of OpenJDK 17 releases.



### NOTE

For all the other changes and security fixes, see [OpenJDK 17.0.6 Released](#).

### Red Hat build of OpenJDK enhancements

Red Hat build of OpenJDK 17 provides enhancements to features originally created in previous releases of Red Hat build of OpenJDK.

#### Enhanced BMP bounds

By default, Red Hat build of OpenJDK 17.0.6 disables loading a linked International Color Consortium (ICC) profile in a BMP image. You can enable this functionality by setting the new **sun.imageio.bmp.enabledLinkedProfiles** property to **true**. This property replaces the old **sun.imageio.plugins.bmp.disableLinkedProfiles** property

See [JDK-8295687 \(JDK Bug System\)](#).

#### Improved banking of sounds

Previously, the **SoundbankReader** implementation, **com.sun.media.sound.JARSoundbankReader**, downloaded a JAR soundbank from a URL. For Red Hat build of OpenJDK 17.0.6, this behavior is now disabled by default. To re-enable the behavior, set the new system property **jdk.sound.jaroundbank** to **true**.

See [JDK-8293742 \(JDK Bug System\)](#).

#### Enhanced Datagram Transport Layer Security (DTLS) performance

Red Hat build of OpenJDK now exchanges DTLS cookies for all new and resumed handshake communications.

To re-enable the previous release behavior, set the new system property **jdk.tls.enableDtlsResumeCookie** to **false**.

See [JDK-8287411 \(JDK Bug System\)](#).

#### Added note for LoginModule implementation

The Red Hat build of OpenJDK 9 release changed the **Set** implementation, which holds principals and credentials, so that the implementation can reject **null** values. Any attempts to call **add(null)**, **contains(null)**, or **remove(null)** would throw a **NullPointerException** message.

The Red Hat build of OpenJDK 9 release did not update the **logout()** method in the **LoginModule** implementation to check for **null** values. These values could occur because of a failed login attempt, which can cause a **logout()** call to throw a **NullPointerException** message.

The Red Hat build of OpenJDK 17.0.6 release updates the **LoginModule** implementations to check for **null** values. Additionally, the release adds an implementation note to the specification that states the change also applies to third-party modules. The note advises developers of third-party modules to verify that a **logout()** method does not throw a **NullPointerException** message.

- See [JDK-8015081 \(JDK Bug System\)](#).

- See [JDK-8282730](#) (JDK Bug System).

## CHAPTER 4. ADVISORIES RELATED TO THIS RELEASE

The following advisories have been issued to bugfixes and to CVE fixes included in this release:

- [RHSA-2023:0190](#)
- [RHSA-2023:0191](#)
- [RHSA-2023:0192](#)
- [RHSA-2023:0193](#)
- [RHSA-2023:0194](#)

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